NEUROPTERA1

FROM THE WILLIAMS GALAPAGOS EXPEDITION

BY NATHAN BANKS

Neuroptera have not previously been reported from the Galapagos Islands; the small collection taken by William Beebe, though broken, are of much interest. None appear identical with any on the mainland, but all are related to Central American forms, the Megalomus, however, showing some affinity to certain South American species. The types are in the collection of the N. Y. Zoological Society.

Family MYRMELEONIDAE

Myrmeleon perpilosus sp. nov.

Belonging to the group of *M. crudelis*, in which there are no black bristles above on the thorax. The face and vertex black, the face shining, no pale spots on the vertex. The pronotum with two pale spots each side and the anterior corners pale, and there are traces of pale in the middle of the meso- and metathorax. Pleura wholly dark. Abdomen with the tips of last two segments pale, and a pale spot near tip of some of the other segments; entire abdomen clothed with long white hair, rather longer than usual, and in the male much longer than in *M. crudelis* and allies. In the female the last ventral segment has black hair. Legs pale, the femora with broad brown stripe, tibia lined with brown, tarsal joints dark at tips. Wings moderately narrow, acute at tips; hyaline, veins dotted with dark, the main veins dark in streaks at all connections; costals simple, unforked, in cubital area three rows of cells, eight branches to radial sector, seven cross-veins before radial sector in fore wings.

Length of front wings, 27 mm.

Locality.—Conway Bay, Indefatigable, Galapagos Islands.

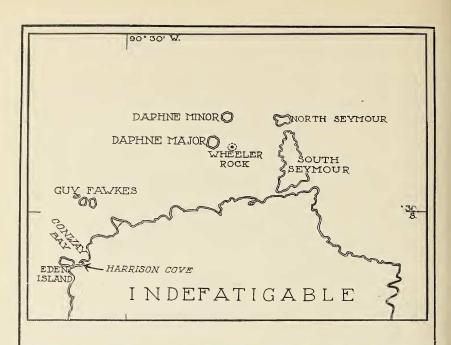
Collected.—April 1, 1923.

Family CHRYSOPIDAE

Chrysopa nigripilosa sp. nov.

Greenish, much marked with black. Palpi mostly black; a black stripe on each cheek under each eye, a black spot under base of each antenna; antennae dull brownish. Pronotum with many minute dark dots, from each a

¹ Department of Trop. Research No. 183.



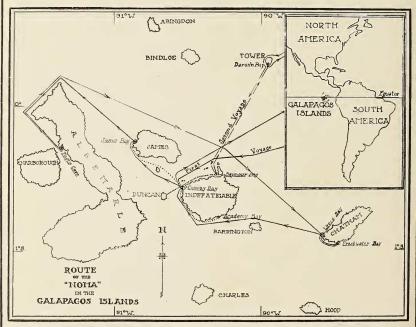


Plate A. SKETCH MAP OF GALAPAGOS ISLANDS
Route of the Noma, and details and location of the Archipelago.

black hair, rest of thorax also with short, black hair, and a few dark spots. Basal part of the abdomen with a broad median dark stripe, beyond broken up; ventral segments five to seven dark. Legs pale, with black hair. Wings hyaline, stigma with about three dark spots; venation pale, much marked with black, the gradates and several of the basals wholly dark, the costals and radial cross veins black at ends, and nearly all connections of veins dark. The cubital vein just before the third cubital cell is broadened; the divisory vein ends much beyond the cross-vein; gradates divergent, inner row (of about 4) nearer to the radial sector than to the outer row (of about 7). Hind wings marked much as the fore wings, but less strongly; about three inner and six outer gradates. Both wings are moderately slender, and acute at tips.

Length of fore wing, 11 mm. Locality.—South Seymour, Galapagos Islands. Collected.—April 20, 23, 1923.

Chrysopa galapagoensis sp. nov.

Pale yellowish (probably greenish alive), a black spot on each cheek under the eye, palpi marked with black. Pronotum as broad as long, narrowed in front, with rather long hair on sides. Wings hyaline, venation pale, marked with black; in the fore wing the gradates, several basal cross-veins, the radial, and some cubital cross-veins wholly dark, the costals and some median cross-veins partly dark; stigma greenish. In hind wings the gradates wholly, and costals and radials partly, dark. Both wings acute at tips, the fore wings not especially slender. The gradates in parallel series, about six or seven in each, the inner row almost as near to outer row as to the radial sector; divisory veinlet ends before the cross-vein.

Length of fore wing, 10 mm.

Locality.—South Seymour, Galapagos Islands.

Collected.—April 23, 1923.

Family HEMEROBIIDAE

Megalomus darwini sp. nov.

Face tawny, vertex darker, antennae pale brownish, paler on basal joint, thorax and abdomen dark; legs pale, front and mid tibiae with band before middle and another near tip, hind tibia very long. Wings rather slender for a Megalomus, nearly two and one-half times as long as broad, brownish, rather darker behind than in front, with darker clouds over some of the cross-veins; venation dark with here and there pale spots or short streaks, margin alternately pale and dark, gradates wholly dark; hind wings pale, the venation wholly dark, except some inner gradates which are hyaline. The fore wings have a broad costal area and most of the costal cross-veins forked. There are but four branches of the radial sector, the first however with two branches from the upper side, the gradate behind this branch is hyaline; outer gradates number about twelve. In hind wings the inner gradates are hyaline and hardly visible, and the four outer are not very distinct. Appendages short, not promi-

nent, lower appendages short, outer side rounded and end in a corneous point.

Length of fore wing, 6 mm.

Locality.—Conway Bay, Indefatigable, Galapagos Islands.

Collected.—April 1, 1923.

This is one of the series of scientific papers of the Harrison Williams Galapagos Expedition, under the directorship of William Beebe, sent out by the Department of Tropical Research of the New York Zoological Society. The general account and narrative of the expedition, together with the natural history and photographs of the fauna, are embodied in a volume by William Beebe, published by G. P. Putnam's Sons, under the auspices of the Zoological Society. Its title is "Galapagos; World's End."